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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-------------|----------------------|-------------------------|-----------------|
| 09/555,304 | 05/26/2000 | STEFAN PHILIPP | PHD99-100 | . 3918 |
| 7590 11/26/2003 Philips Electronics North American Corp. 580 White Plains Rd. Tarrytown, NY 10591 | | | EXAMINER | |
| | | | VAUGHAN, MICHAEL R | |
| | | | ART UNIT | PAPER NUMBER |
| • | | | 2131 | 1 |
| | | | DATE MAILED: 11/26/2003 | , 7 |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | _ | | | | |
|---|--|---|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| " | 09/555,304 | PHILIPP, STEFAN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Michael R Vaughan | 2131 | | | | |
| The MAILING DATE of this communication a | appears on the cover sheet t | with the correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, and if NO period for reply is specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by stated and the period for reply will, by stated and the period for reply will, by stated and patent term adjustment. See 37 CFR 1.704(b). Status | N. t.1.136(a). In no event, however, may a reply within the statutory minimum of th iod will apply and will expire SIX (6) M6 tute, cause the application to become. | a reply be timely filed nirty (30) days will be considered timely. DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on 26 | <u>6 May 2000</u> . | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ TI | his action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4a) Of the above claim(s) is/are without 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-4</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction an | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Exam 10) The drawing(s) filed on 26 May 2000 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the constant. The oath or declaration is objected to by the | a) accepted or b) ⊠obj the drawing(s) be held in abey rection is required if the drawir | ance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.121(d). | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 12) △ Acknowledgment is made of a claim for fore a) △ All b) ☐ Some * c) ☐ None of: 1. △ Certified copies of the priority document of: 2. ☐ Certified copies of the priority document of: 3. ☐ Copies of the certified copies of the property application from the International Burent of the attached detailed Office action for a since a specific reference was included in the 37 CFR 1.78. a) ☐ The translation of the foreign language of the priority document is made of a claim for domestic as a specific reference was included in the first sentence of the foreign language of the priority document is made of a claim for domestic as a specific reference was included in the first sentence of the priority document of th | ents have been received. ents have been received in priority documents have been reau (PCT Rule 17.2(a)). list of the certified copies no estic priority under 35 U.S.C e first sentence of the specific provisional application has estic priority under 35 U.S.C | Application No en received in this National Stage of received. C. § 119(e) (to a provisional application) ication or in an Application Data Sheet. been received. C. §§ 120 and/or 121 since a specific | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper Notes | 5) 🔲 Notice o | v Summary (PTO-413) Paper No(s) I Informal Patent Application (PTO-152) | | | | |

DETAILED ACTION

Claims 1-4 have been examined and are pending.

Drawings

Formal drawings are required in response to the instant Office action.

The drawings are objected to because the figure should not have "1/1" because it is the only figure of the invention (see MPEP 608.02 (u)(1)). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC ' 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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Claims 1, 2, 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Ehrsam et al (USP 4,386,234).

As per claim 1, Ehrsam et al teach an encryption method wherein at least one cryptographic sub-operation is performed on digital data stored as at least one data bit word in a storage cell or a register, characterized in that a data bit word generated on the basis of random numbers is stored in a storage cell before a data bit word is written therein (column 36, lines 30-44).

As per claim 2, Ehrsam et al teach that the bit word based on random numbers is written into the storage cell by a processor (see Figure 2, elements 2 and 3).

As per claim 4, Ehrsam et al teach that the bit word based on random numbers is stored in the storage cell at an instant in time, which precedes the cryptographic sub-operation (column 36, lines 30-44).

Claim Rejections - 35 USC '103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehrsam et al in view of Yasuhiko (JP 01-298829).

As per claim 3, Ehrsam et al teach that the bit word based on random numbers is written into the storage cell via a microprocessor (see Figure 2, elements 2 and 3) but is silent in disclosing that the

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storage cell is directed connected to a random number source. Yasuhiko teaches that the bit word based on random numbers is written into the storage cell via a direct connection between a random number source and the storage cell (see abstract constitution). Yasuhiko teaches that this is performed to improve the characteristic against complicated cryptographic processing, to privacy security and prevention of illegal invasion to a network line (see abstract purpose). It is advantageous to provide a direct line to the storage cell from the random number source because that would permit a secure path for the data to follow without having to be stored temporarily.

In view of this, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the teaching of Yasuhiko within the system of Ehrsam et al because having a direct line between the random generator and the storage cell provides a secure path that can be used to efficiently supply the storage cell with random numbers to protect against cryptanalysis. One skilled in the art would have been motivated to generate the claimed invention with a reasonable expectation of success.

Remarks

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patents:

4,278,837

Best

5,293,424

Holtey et al.

5,644,681

Takahashi et al.

5,764,857

Suzuki

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael R Vaughan whose telephone number is 703-305-0354. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

MV Michael R Vaughan Examiner Art Unit 2131

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100